

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/002493

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F23Q2/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F23Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 086 358 A (POTSKHISHVILI DAVID VAKHTANGOV ET AL) 11 July 2000 (2000-07-11)	19-21
A	column 8, line 44 - column 9, line 15; figures 2-4	1,2,5, 10,12
X	US 6 287 109 B1 (HIROTA RYOHEI) 11 September 2001 (2001-09-11)	19
A	cited in the application column 4, line 28 - line 49	1,2,5, 10,12
A	US 5 171 143 A (SOHN JIN-CHANG) 15 December 1992 (1992-12-15)	1,2,5, 10,12
	figures 2,7 column 3, line 17 - line 53 column 5, line 59 - column 6, line 5	
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

12 November 2004

Date of mailing of the international search report

23/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Mougey, M

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/002493

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/119409 A1 (AMOROS ENRIQUE NOLLAS ET AL) 29 August 2002 (2002-08-29) paragraphs '0045!, '0046!; figures 2-7b	3,4
A	US 2002/180313 A1 (ORAZIETTI RICHARD M) 5 December 2002 (2002-12-05) paragraphs '0036!, '0037!; figures 1,2	1,2,5, 10,12,19
A	US 5 236 351 A (TIEN ANDREW S H) 17 August 1993 (1993-08-17) column 3, line 36 - column 4, line 22; figures 1,2	12

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/002493

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6086358	A	11-07-2000 CA 2325117 A1	04-05-2001
US 6287109	B1	11-09-2001 NONE	
US 5171143	A	15-12-1992 NONE	
US 2002119409	A1	29-08-2002 BR 0207720 A CA 2439479 A1 CZ 20032611 A3 EP 1390665 A1 JP 2004522124 T TW 579413 B WO 02068868 A1	23-03-2004 06-09-2002 12-05-2004 25-02-2004 22-07-2004 11-03-2004 06-09-2002
US 2002180313	A1	05-12-2002 BR 0210070 A CA 2448693 A1 EP 1390669 A2 JP 2004527722 T WO 02097331 A2	22-06-2004 05-12-2002 25-02-2004 09-09-2004 05-12-2002
US 5236351	A	17-08-1993 NONE	